

Introduction to Special Issue

IT has been a pleasure for us to be Guest Editors for the special issue honoring Professor James R. Wait. We were amazed and very pleased by the overwhelming response to the *Call for Papers*. The size of this special issue is a tribute to the stature of one of the genuine giants in antennas and propagation.

We would like to thank Professor E. Smith for responding to our invitation to write a tribute to Jim Wait. His paper is the lead paper in this Special Issue. We also thank each and every author for participating in this project. The eagerness and the diligence of the authors in writing and revising has made our job so much easier.

We thank the many reviewers whose assistance greatly helped in producing what we believe is a strong and representative array of papers that reflect the breadth and depth of Jim Wait's accomplishments. The reviewers responded with incisive comments in an expeditious manner. Their cooperation has played a major role in delivering the Special Issue to production in less than a year from the close of the *Call for Papers*.

Finally, we thank the Antennas and Propagation editorial staff. In particular, Ms. M. Hughes, Editorial Assistant, and Professor L. W. Pearson, Editor-in-Chief, who consistently provided a climate in which we all worked to accomplish the various publication steps in a professional and timely manner.

DONALD G. DUDLEY, *Guest Editor*
U.S. Department of Commerce
NIST
Boulder, CO 80303-3328

HSUEH-YUAN PAO, *Guest Editor*
Lawrence Livermore National Laboratory
University of California
Livermore, CA 94551

DAVID A. HILL, *Guest Editor*
Radio Frequency Technology Division
NIST
Boulder, CO 80305-3337

Donald G. Dudley (M'83–SM'87–F'90) received the Ph.D. degree from the University of California at Los Angeles (UCLA) in 1968.

He is Professor Emeritus in the Department of Electrical and Computer Engineering, University of Arizona, Tucson. His principal interests are in mathematical methods in electromagnetics, inverse theory, and down-borehole geophysics. At the University of Arizona, he is one of the founding members of the Program in Applied Mathematics and has served eight years as the Director of the Electromagnetics Laboratory there. He is the author of *Mathematical Foundations for Electromagnetic Theory* (New York: IEEE Press, 1994). He is the Editor of the IEEE Press Series on Electromagnetic Wave Theory, which presently contains 20 titles.

Dr. Dudley is a member of the International Union of Radio Science (URSI). He is a past Chairman of the U.S. Commission on Fields and Waves (Commission B) and a past Member of the U.S. National Committee (USNC). He is also a past member of the IEEE AP-S Administrative Committee and presently is Chairman of the IEEE Electromagnetics Award Committee. He and two colleagues were awarded the 1997 Schelkunoff Prize for Best Paper of the Year for the IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION. In 2000, he was awarded an IEEE Third Millennium Medal. He has been twice elected by students as the Outstanding Professor in the College of Engineering and Mines.

Hsueh-Yuan Pao (S'86–M'87–SM'98) received the undergraduate degree in physics from Nanjing University, China, and the M.S. and Ph.D. degrees in electrical engineering from the University of Arizona, Tucson, in 1986 and 1995, respectively.

In 1986, he joined EMP, Chatsworth, CA, where he designed the telemetry tracking systems. From 1988 to 1992, he was a Technical Staff Member at Watkins–Johnson Company, San Jose, CA, where he designed and developed many broad-band microwave and millimeter-wave antenna systems. From 1993 to 1995, he held a position in Hughes Missile Systems Company, Tucson, AZ. In 1996, he transferred to Hughes Space and Communications Company, El Segundo, CA, where he worked on different microwave systems for satellite applications. He moved back to the San Francisco Bay Area in 1997 and was with Hyundai Electronics America, where he was engaged to develop the wireless code-division multiple-access (CDMA) base stations. Now, he is a member of the Defense Science Engineering Division, Lawrence Livermore National Laboratory, University of California, Livermore. His areas of interests are transient electromagnetic phenomenon, phased-array antennas, and wireless communications.

Dr. Pao was awarded a Howard Hughes Doctoral Fellowship (full time) in 1993. He was the recipient of the IEEE Schelkunoff Best Paper Award in 1997. In 2000, he received IEEE Third Millennium Medal. He is the Chairman of the San Francisco Bay Area Joint Chapter of IEEE AP Society. He is the Steering Committee General Chairman for 2004 IEEE AP/URSI International Symposium. He is an Associate Editor for IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION.

David A. Hill (M'72–SM'76–F'87) was born in Cleveland, OH, on April 21, 1942. He received the B.S.E.E. and M.S.E.E. degrees from The Ohio University, Athens, in 1964 and 1966, respectively, and the Ph.D. degree in electrical engineering from The Ohio State University, Columbus, in 1970.

From 1970 to 1971, he was a Visiting Fellow with the Cooperative Institute for Research in Environmental Sciences, Boulder, CO, where he worked on pulse propagation. From 1971 to 1982, he was with the Institute for Telecommunications Sciences, Boulder, CO, where he worked on antennas and propagation. Since 1982, he has been with the National Institute of Standards and Technology, Boulder, CO, where he works on electromagnetic theory. He is also a Professor Adjoint in the Department of Electrical and Computer Engineering, University of Colorado, Boulder.

Dr. Hill is a member of URSI Commissions A, B, E, and F. He has served as a technical editor for the IEEE TRANSACTIONS ON GEOSCIENCE AND REMOTE SENSING and the IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION.